FIG. 1

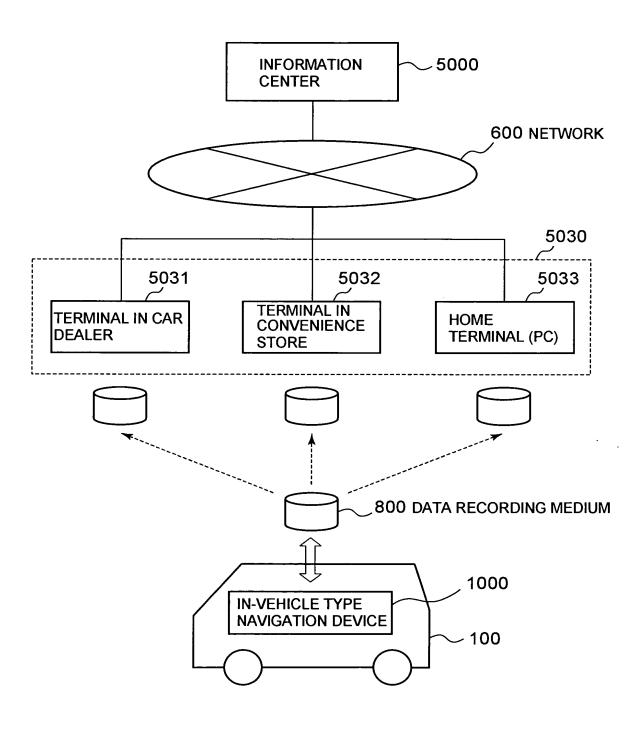


FIG. 2 901 904 PROCESSING UNIT **READER/WRITER** 905 902 **MEMORY OUTPUT UNIT** 903 906 **EXTERNAL INPUT UNIT** STORAGE UNIT 906 **NETWORK** COMMUNICATION **UNIT**

FIG. 3

STORED INFORMATION IN

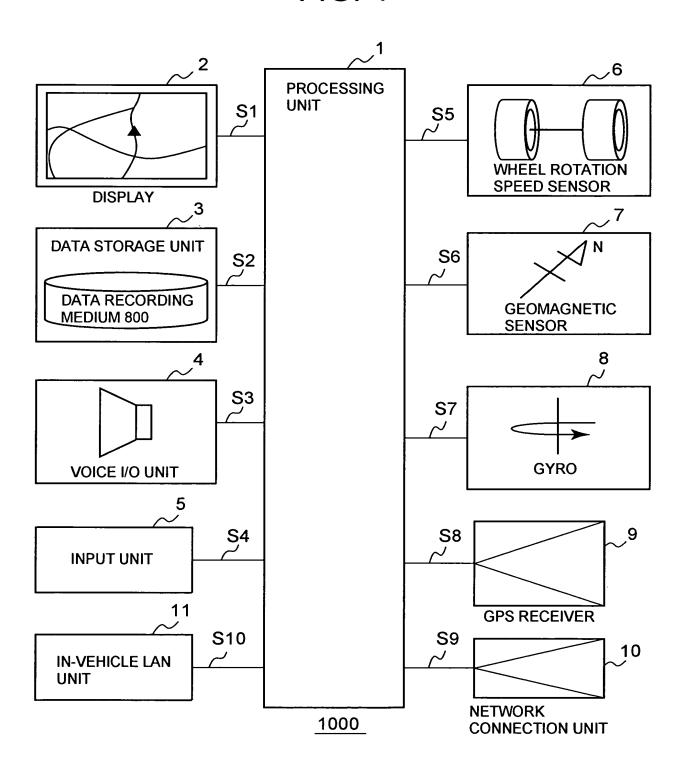
USER INFORMATION 501 LATEST MAP DATA 502

PROBE INFORMATION

STATISTICAL TRAFFIC INFORMATION

:
:
:
:

FIG. 4



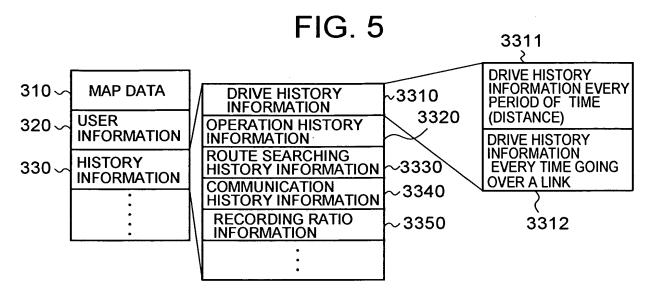


FIG. 6

DRIVE HISTORY INFORMATION EVERY PREDETERMINED PERIOD OF TIME (EVERY PREDETERMINED DISTANCE)

33111	33112	33113 ~	33114
MEASURED DATE AND TIME	POSITION	LINK ID	VEHICLE INFORMATION
***	***	***	***
***	***	***	***
		•	

FIG. 7

DRIVE HISTORY INFORMATION EVERY TIME GOING OVER A LINK 33121 33124 33122 33123 LINK ENTERING DATE AND VEHICLE LINK TRAVEL LINK ID **INFORMATION** TIME TIME *** *** *** *** *** *** *** ***

FIG. 8

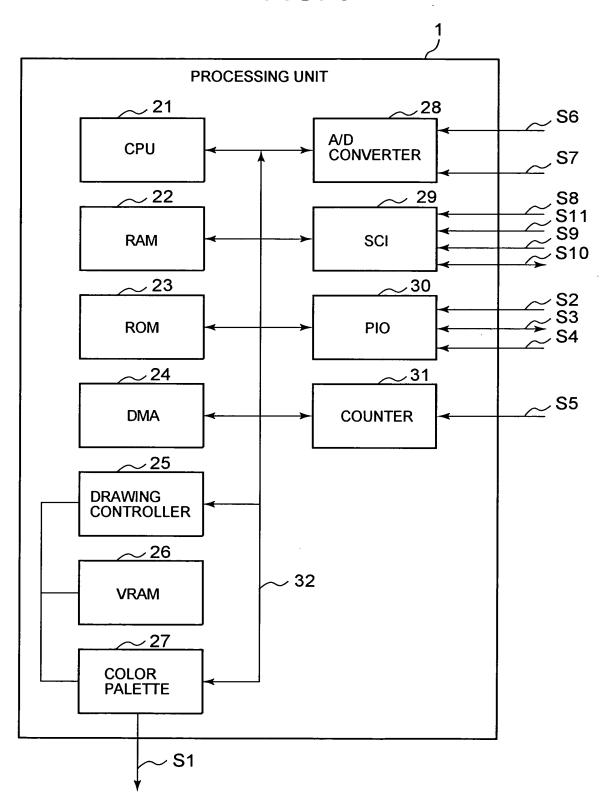


FIG. 9

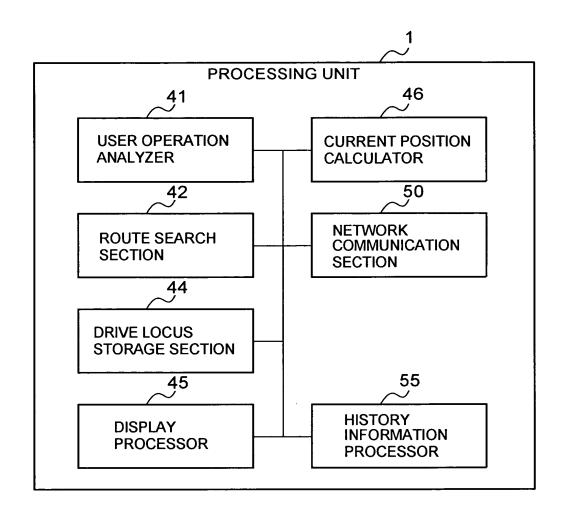


FIG. 10

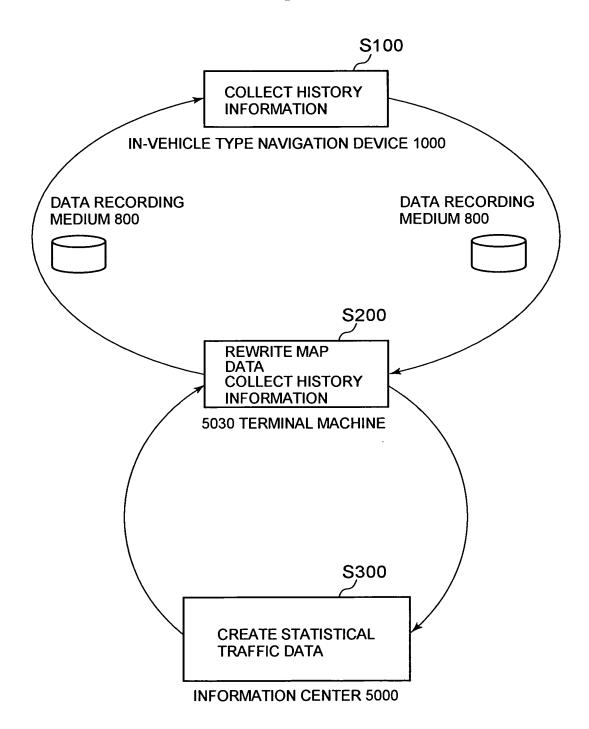
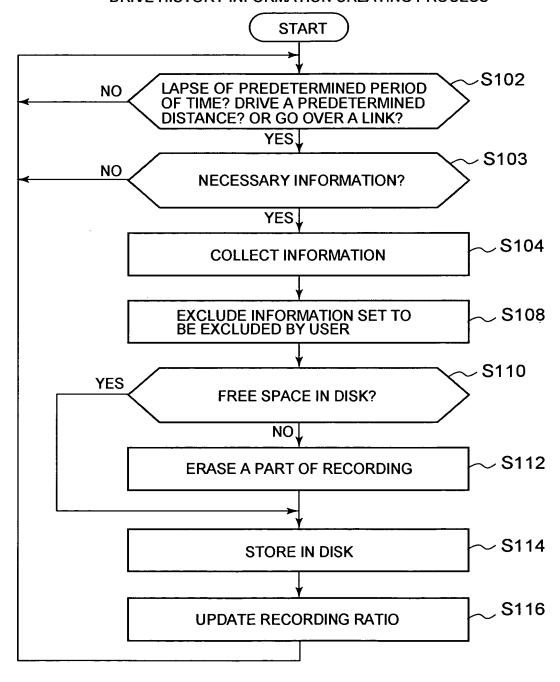


FIG. 11

201 SETTING SCREEN AS TO RECORDING HISTORY **INFORMATION RECORD HISTORY INFORMATION?** 211 RECORDING OF HISTORY YES INFORMATION WILL REDUCE CHARGE FOR UPDATING MAP DATA. NO **YES** 220 **DETAILED SETTING SCREEN** REMOVE A CHECK FROM THE INFORMATION NOT TO BE RECORDED 221 M DRIVE DATE AND TIME M LINK TRAVEL TIME 222 \ M PARKING BRAKE ON/OFF **™** BLINKER ON/OFF M WIPER ON/OFF ☐ ROUTE SEARCH HISTORY **☑** COMMUNICATION HISTORY

FIG. 12

DRIVE HISTORY INFORMATION CREATING PROCESS



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FIG. 13

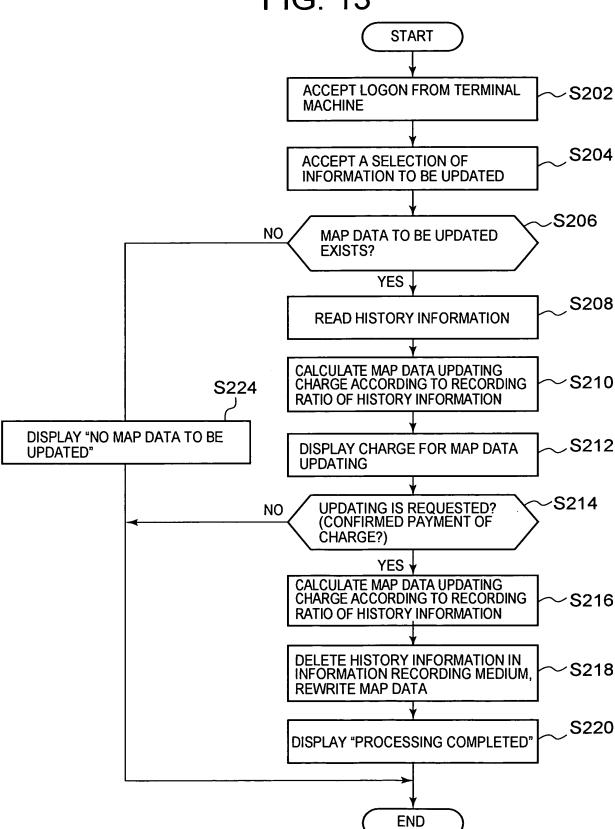


FIG. 14

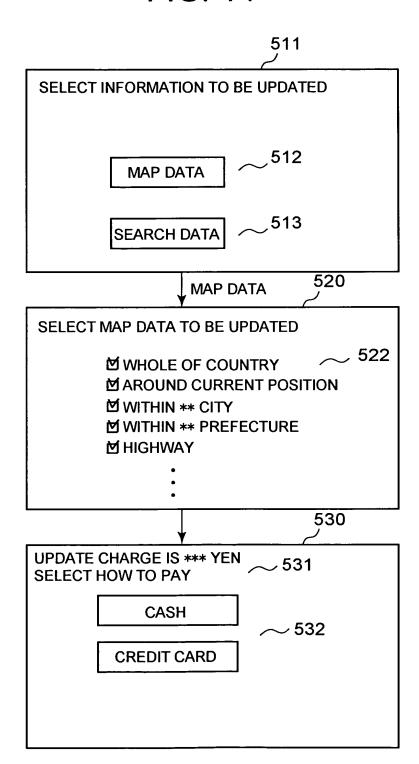


FIG. 15

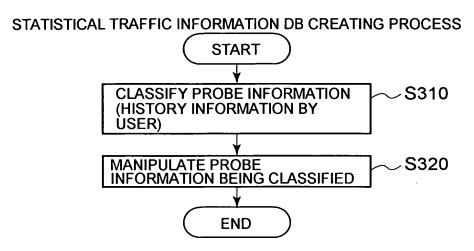


FIG. 16

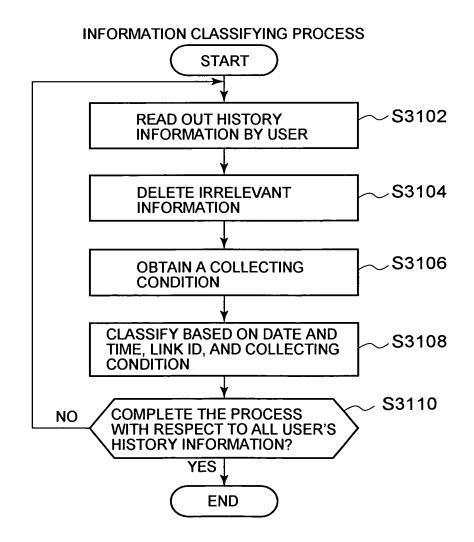


FIG. 17

INFORMATION MANIPULATING PROCESS

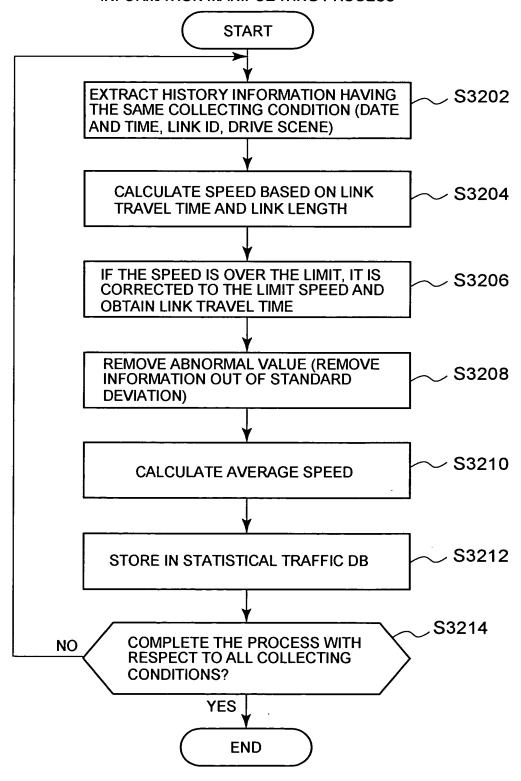


FIG. 18 **- 5000 INFORMATION CENTER** LATEST MAP **HISTORY** DATA **INFORMATION** 5030 **TERMINAL MACHINE UPLOAD HISTORY INFORMATION** 800 MAP DATA HISTORY DATA **INFORMATION** RECORDING **MEDIUM** 1000 IN-VEHICLE TYPE NAVIGATION DEVICE

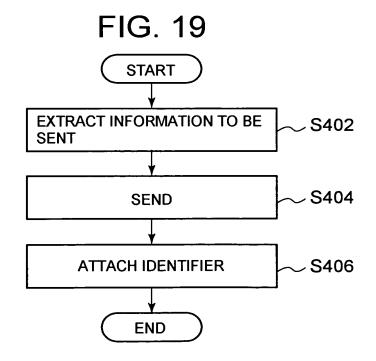


FIG. 20

HISTORY	INFORMA	TION TO	RE SENT
			D1 731 14 1

33111a	33112a	33113a	
MEASURED DATE AND TIME	POSITION	LINK ID	
***	***	***	
*** ***		***	
:	•	:	
	• •		

FIG. 21

DRIVE HISTORY INFORMATION EVERY PREDETERMINED PERIOD OF TIME (PREDETERMINED DISTANCE)

33111	33112	33113	33114	33115
MEASURED DATE AND TIME	POSITION	LINK ID	VEHICLE INFORMATION	IDENTIFIER
***	***	***	***	ON
***	***	***	***	ON
:	:	:	:	:

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FIG. 22

